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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,105

02/13/2004

Noboru Fujiwara

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05/09/2006

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EXAMINER

LUONG, VINH

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,105

Applicant(s)

FUJIWARA, NOBORU

Examiner

Vinh T. Luong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 5, 7 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Vinh T. Luong
Primary Examiner

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's election of the species of Figs. 1a-1c in the reply filed on April 28, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse. MPEP § 818.03(a).

2. Claims 5, 7, and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 28, 2006.

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the

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printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because the abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art in the last sentence. Correction is required. See MPEP § 608.01(b).

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-4, 6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear whether the term that appears at least twice, such as, "a pedaling operation" and "a pedal reaction force" in claim 2 or 8 refers to the same or different features. See double inclusion in MPEP 2173.05(o).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claim 1 and claim 8, as best understood, are rejected under 35 U.S.C. 102(a) as being anticipated by Takayama (JP 2003-127846 published on May 8, 2003 and cited by Applicant).

Regarding claim 1, Takayama teaches a pedal reaction force device for applying a prescribed reaction force to an operating pedal 16 to be depressed by pedaling, comprising: a reaction force generating unit 10-12 for applying a pedaling reaction force to said operating pedal 16 on the basis of displacement due to said operating pedal 16 being mechanically displaced in accordance with a pedaling operation; and a displacement characteristics regulating mechanism 18 disposed between said reaction force generating unit 10-12 and said operating pedal 16, which transmits said reaction force to said operating pedal 16 and simultaneously mechanically sets a variation pattern of displacement magnitude of said reaction force generating unit 10-12 with respect to a pedaling stroke of said operating pedal 16.

Regarding claim 8, said operating pedal 16 is turned around a substantially horizontal support shaft 17 (*id.* English Abstract) by said pedaling operation, said displacement characteristics regulating mechanism 18 is a cam 18 whose dimension from said support shaft 17 is continuously varied and which is turned around said support shaft 17 in an integrated manner with said operating pedal 16, and said reaction force generating unit 10-12 is engaged with said cam 18 and is displaced in accordance with a variation pattern corresponding to a profile of a cam surface A, B.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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11. Claim 1 and claim 2, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Tulaczko et al. (US Patent No. 6,679,366 B2 filed on January 18, 2002).

Regarding claim 1, Tulaczko teaches a pedal reaction force device for applying a prescribed reaction force to an operating pedal 1b, 1c (Figs. 2 and 3) to be depressed by pedaling, comprising: a reaction force generating unit 2-9 for applying a pedaling reaction force to said operating pedal 1b, 1c on the basis of displacement due to said operating pedal 1b, 1c being mechanically displaced in accordance with a pedaling operation; and a displacement characteristics regulating mechanism 18a, 19a (Fig. 2), 18b, 19b (Fig. 3) disposed between said reaction force generating unit 2-9 and said operating pedal 1b, 1c which transmits said reaction force to said operating pedal 1b, 1c and simultaneously mechanically sets a variation pattern of displacement magnitude of said reaction force generating unit 2-9 with respect to a pedaling stroke of said operating pedal 1b, 1c.

Regarding claim 2, said reaction force generating unit 2-9 comprises: a damper device 2, 4-9 for applying a pedaling reaction force to said operating pedal 1b, 1c on the basis of circulation resistance of a fluid by being mechanically compressed or tensioned in accordance with said pedaling operation of said operating pedal 1b, 1c (*id.* col. 3, lines 32-41); and a spring member 3a, 3b for applying a pedaling reaction force to said operating pedal 1b, 1c on the basis of resilient deformation by being mechanically and resiliently deformed in accordance with said pedaling operation of said operating pedal 1b, 1c; wherein said displacement characteristics regulating mechanism 18a, 19a (Fig. 2), 19b, 18b (Fig. 2) intervenes between said damper device 2, 4-9 and/or said spring member 3a, 3b and said operating pedal 1b, 1c.

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12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, and claims 2-4, 6, and 8, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Fabrice (EP 0 919 903 A1 cited by Applicant).

Regarding claim 1, Fabrice teaches a pedal reaction force device for applying a prescribed reaction force to an operating pedal 1a, 21a to be depressed by pedaling, comprising: a reaction force generating unit 20, 16 for applying a pedaling reaction force to said operating pedal 1a, 21a on the basis of displacement due to said operating pedal 1a, 21a being mechanically displaced in accordance with a pedaling operation; and a displacement characteristics regulating mechanism 10 disposed between said reaction force generating unit 20, 16 and said operating pedal 1a, 21a which transmits said reaction force to said operating pedal 1a, 21a and simultaneously mechanically sets a variation pattern of displacement magnitude of said reaction force generating unit 20, 16 with respect to a pedaling stroke of said operating pedal 1a, 21a.

Regarding claim 2, said reaction force generating unit 20, 16 comprises: a damper device 20, 16 for applying said pedaling reaction force to said operating pedal 1a, 21a on the basis of circulation resistance of a fluid (air) by being mechanically compressed or tensioned in accordance with said pedaling operation of said operating pedal 1a, 21a; and a spring member 12 for applying said pedaling reaction force to said operating pedal 1a, 21a on the basis of resilient deformation by being mechanically and resiliently deformed in accordance with a pedaling

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operation of said operating pedal 1a, 21a; wherein said displacement characteristics regulating mechanism 10 intervenes between said damper device 20, 16 and/or said spring member 12 and said operating pedal 1a, 21a.

Regarding claim 3, said spring member 12 is a coil spring 12 that is substantially *concentrically* disposed at the outer circumferential side of said damper device 20, 16 so as to surround said damper device 20, 16 and is compressed and tensioned in an integrated manner with said damper device 20, 16 in accordance with said pedaling operation of said operating pedal 1a, 21a, and a variation pattern of displacement magnitude of said spring member 12 and said damper device 20, 16 is defined by a single displacement characteristics regulating mechanism.

Regarding claims 4, 6, and 8, said operating pedal 1a, 21a is turned around a substantially horizontal support shaft 2, 22 by a pedaling operation, said displacement characteristics regulating mechanism is a cam 10 whose dimension from said support shaft 2, 22 is continuously varied and which is turned around said support shaft 2, 22 in an integrated manner with said operating pedal 1a, 21a, and said reaction force generating unit 20, 16 is engaged with said cam 10 and is displaced in accordance with a variation pattern corresponding to a profile of a cam surface 10.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Phillippe (cam 36), Fujiwara (cam 34), Janosi'831 (cam 34), Janosi'779 (cam 36), and Schroter (cam 6').

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

May 8, 2006



Vinh T. Luong
Primary Examiner